

LIT-124/GCD 98-25 N00

Amendments

Please amend the above-identified application as follows:

In the Specification:

Please amend the paragraph at page 4, line 27, to page 5, line 10, by substitution as follows:

B¹

One preferred embodiment of the invention shown in FIGURE 1 is illustrated in FIGURES 2 and 2A-2H. In this embodiment, the sensors S1-S96 are divided into 16 sensor groups of 6 sensors each. A first sensor group 301 is shown in FIGURE 2A. The sensor group 301 is optically closest to the lasers L1-L6 and to the processing electronics 200. The first sensor group 301 is coupled to the six distribution fiber lines DF1-DF6 through which the input optical signals are carried. The distribution fiber lines DF1-DF6 are connected to respective standard 1 × 2 input couplers 320 which in turn are connected to sensors S1-S6. The input couplers 320 couple a fraction of the input signal to their respective sensors S1-S6 and pass the remaining optical signal onto other couplers 320, although for some applications the first sensor group 301 alone (without additional sensor groups) may be utilized, in which case the coupling ratio for each of the input couplers 320 is 100%. In the embodiment shown in FIGURE 2, however, the coupling ratio for the input couplers 320 of the first sensor group 301 is selected to be 3.5%, with the remaining fraction (96.5% minus any excess losses) of the input signals propagating towards the other sensor groups.